MILITARY SPECIFICATION SHEET

ELECTRON TUBES, RECEIVING

TYPES 6V6Y AND 6V6GTY 1/
a b

The complete requirements for procuring the electron tubes described herein shall consist of this document and the latest issue of Specification MIL-E-1.

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

DESCRIPTION: Beam power pentode

Outline	a	---	8-6 (EIA) (D)
Outline	b	---	9-11 or 9-41 (EIA) (D)
Base	a	---	B-7-22 (low-loss phenolic)
Base	b	---	Low-loss phenolic (see note 1)
Envelope	a	---	MT8
Envelope	b	---	T9
Cathode	a, b	---	Coated unipotential

Base connections:

Pin No.	---	1	2	3	4	5	7	8
Element a	---	sh	h	a	g2	g1	h	k, g3
Element b	---	nc or no pin	h	a	g2	g1	h	k, g3

ABSOLUTE-MAXIMUM RATINGS:

Parameter:		Ef	Eb	Ec1	Ec2	Ik	Pp	Pg2	Ehk	Alt
Unit:		V	Vdc	Vdc	Vdc	mAdc	W	W	v	ft
Maximum:	a, b	6.9	350	---	310	65	13.2	2.2	100	10,000
Minimum:	a, b	5.7	---	---	---	---	---	---	---	---
TEST CONDITIONS:	a, b	6.3	250	-12.5	250	---	---	---	---	---

GENERAL:

Qualification - Required

1/ To identify those tests that are applicable to a given type or to several types; tube types are designated by letters.

(D) denotes changes

METHOD	REQUIREMENT OR TEST	TYPE	CONDITIONS	AQL (PERCENT DEFECTIVE)	INSPECTION LEVEL OR CODE	SYMBOL	LIMITS		UNIT
							MIN	MAX	
	Quality conformance inspection, part 1								
Ⓓ 1266	Total grid current	a, b	See note 2	0.65	II	Ic1	0	-2.0	μAdc
1256	Electrode current (anode)	a, b		0.65	II	Ib	33	57	mAdc
1256	Electrode current (screen grid)	a, b		0.65	II	Ic2	0	7.5	mAdc
1341	Power output	a, b	Class A amplifier; Esig = 8.8 Vac; Rp = 5,000 ohms	0.65	II	Po	3.6	---	W
1246	Audio frequency noise	a, b	Esig = 280 mVac; Rp = 2,000 ohms (see note 3)	0.65	II	EB	---	---	VU
Ⓓ 1231	Emission	a, b	Eb = Ec2 = Ec1 = 30 Vdc (see note 2)	0.65	II	Is	100	---	mAdc
1201	Shorts and discontinuity detection	a, b		0.4	II	---	---	---	---
	Quality conformance inspection, part 2								
1031	Low-frequency vibration	a, b	Ec1 = -25 Vdc; Rp = 2,000 ohms	6.5	S3	Ep	---	500	mVac
1301	Heater current	a, b		6.5	S3	If	410	490	mA
Ⓓ 1336	Heater-cathode leakage	a, b		6.5	S3	Ihk	---	50	μAdc
1306	Transconductance	a, b		6.5	S3	Sm	3,000	5,200	μmhos
1331	Direct-interelectrode capacitance	a b	No shield Shield No. 308	6.5	Code E	Cgp Cin Cout	--- 7.9 5.6	0.9 11.1 13.5	pF pF pF
1101	Secureness of base wafer insert	a		6.5	S3	---	---	---	---
1101	Secureness of base	b		6.5	S3	---	---	---	---
1111	Base pin solder depth	a, b	See note 4	6.5	S3	---	---	---	---
1211	Insulation of electrodes	a, b		4.0	S3	---	10	---	Meg
Ⓓ 1105	Permanence of marking	a, b		---	---	---	---	---	---
	Quality conformance inspection, part 3								
1501	Intermittent life	a, b	Group A; Eb = Ec2 = 300 Vdc; Ec1 = -20 Vdc; Ehk = 100 V	---	---	---	---	---	---
---	Life-test end point (intermittent) (500 hours)	a, b	Power output	---	---	Po	2.3	---	W

NOTES:

1. The base shall be one of the following: B6-81, B6-84, B7-7, or B7-59.
2. This test to be performed at the conclusion of the holding period.
3. The rejection level shall be set at the VU meter reading obtained during calibration.
4. This test applies for flexible leads as well as for rigid leads.

Custodians:
Army - EL
Navy - EC
Air Force - 85

Review activities:
Army - EL, MU
Navy - SH
Air Force - 11, 85
DSA - ES

User activities:
Army -
Navy - AS, OS, MC, CG
Air Force - 19

Preparing activity:
Navy - EC

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